STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Highlighted questions are supplemental to the standard SEPA checklist. These questions look at the proposed project in relationship to the surrounding landscape. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the attached forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name: **J DOZER** Agreement #: **074722**

2. Name of applicant: **Department of Natural Resources**

3. Address and phone number of applicant and contact person:

   DNR Northwest Region
   919 North Township Street
   Sedro Woolley, WA 98284
   Contact Person: Candace Johnson (360) 856-3500

4. Date checklist prepared: **September 2, 2003**

5. Agency requesting checklist: **Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

a.	Auction Date:	**01/26/2004**
b.	Planned contract end date (but may be extended):	**09/30/2005**
c.	Phasing:	**Not Applicable**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Timber Sale

a.	Site preparation:	**Treatment will be assessed in 2-3 years.**
b.	Regeneration Method:	**Hand plant with conifer seedlings.**
c.	Vegetation Management:	**Treatment will be assessed in 3-5 years.**
d.	Thinning:	**Treatment will be assessed in 10-15 years.**

   Roads:

   The LL-12 and LL-1209 roads will remain open to be used to access future timber sales, as will existing roads being used for this proposal.

   Rock Pits and/or Sale:

   The TL-01 hardrock pit will continue to be used and expanded in the future for timber sale and road maintenance activities within the area.

   Other:

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☒303 (d) – listed water body in WAU: ☐temp ☐sediment ☐completed TMDL (total maximum daily load): **The enclosed department GIS map shows one 303d listed water in the vicinity of the proposal. This stream segment is part of the West Fork of Woods Creek. Any tributaries in the proposed J Dozer timber sale do not feed the West Fork of Woods Creek. Contact the DNR Northwest Region office or http://www.ecy.wa.gov/programs/wq/303d for more information.**
☐Landscape plan:
☒Watershed analysis: **Woods Creek Watershed Analysis, 1993, available at Northwest Region Office.**
☐Interdisciplinary team (ID Team) report:
☒Road design plan: **Contact Northwest Region Office.**
☒Wildlife report: **Biologist Memo dated 4/13/2003, available at Northwest Region Office.**
☐Geotechnical report:
☒Other specialist report(s): **Hydrologist/Soils Specialist Memo dated 3/13/2003.**
☐Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
☒Rock pit plan: **Contact Northwest Region Office.**
☒Other: **Forest Resource Plan & Environmental Impact Statement, July 1992; Final Habitat Conservation Plan, September 1997; State Soil Survey, 1992.**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

☐HPA ☐Burning permit ☐Shoreline permit ☐Incidental take permit ☒FPA # _____ ☐Other:

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

Proposal Area: **Located approximately 9.5 miles NE of Monroe, WA, approximately 200-acres of mature timber located in the SE ¼ of the SW ¼ of Section 2 and parts of the northern ½ of Section 11, in Township 28 North, Range 07 East were considered for harvest in the J Dozer proposal. This ownership, containing primarily 73-year-old Douglas fir (DF) and western hemlock (WH), is surrounded by DNR managed stands with the exception of one 40-acre commercially owned plantation lying to the southwest of the proposal and another 40-acre residentially owned plantation located to the east. The proposal lies on the boundary between Sultan and Woods Creek Watershed Administrative Units (WAUs). A watershed analysis was conducted for the Woods Creek WAU in 1993.**

The roads and boundaries for the proposal have been laid out to address resource protection objectives as well as operational feasibility. The northeast boundary and the eastern boundary are set to provide buffers (187.5 feet and 100 feet from edges) for two forested wetlands, one which is greater than one acre and the second being equal to .8 acres. The southern boundary of the proposal lies more than 1,000 feet from "Mulligan", a DNR timber sale currently (2003) being harvested, thereby heeding to the PO14-032 "Green Up of Harvest Units" procedure. The proposal is also located approximately 800 feet north of an open wetland greater than 1 acre.

All timber in the current proposed sale can be ground-based harvested. While the three northern most roads (LL-1204, LL-1206, and LL-1206-02) will be abandoned after the proposed sale is complete, LL-12 and LL-1209 may be used in a future sale to access the remaining timber located in this ownership (northern ½ of Section 11).

Gross Acreage: **The gross acreage (proposal area excluding wetland buffers located outside proposal boundaries but including leave tree areas) totals 85.40 acres.**

Timber Sale Area: **The timber sale area (gross acreage minus leave tree area), as determined by GPS survey and hand traverse, totals 85.02 net acres. This is also referred to as "net area" or "net harvest area" in this application.**

Total # of Units:	**1**
Area in Acres:	**85.4 (gross), 85.0 (net)**
Estimated volume:	**4,071 MBF**
Type of harvest:	**Regeneration**
Logging system:	**Cable orGround-based harvest**
Landings:	**5**
Rock pits and or sales:	**1**
Roads:	**Four newly constructed and one spur totaling 6,246 feet. 100 feet reconstruction. Two roads and spur, totaling 3,003 feet, will be abandoned after harvest.**

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Pre-harvest stand description: **Established in 1929, the proposal stand is comprised of a mixture of DF and WH with scattered western red cedar (RC). DF represents the dominant classes, with the diameter at breast height (DBH) ranging from 14 to 30 inches. WH is found in the intermediate size classes with few trees greater than 22 inches DBH. Hardwoods, including black cottonwood, big leaf maple, and red alder, represent approximately 5% of the stand. Conifer basal area within the stand averages 267 ft^2 per acre and diameter at breast height (DBH) for the whole stand ranges from 8 to 31 inches while average height ranges from 110 to 170 feet. Field reconnaissance reveals that the timber in the central portion of the proposal is slightly larger than the remainder of the unit and the understory, containing swordfern, huckleberry, and small numbers of hemlock seedlings, is more open. An elongated patch of hardwoods is also located in the northern portion of the proposal (towards the northwest) comprised of big leaf maple, red alder and black cottonwood. In contrast, slightly smaller, more densely spaced DF and WH can be found in the southern section along with a particularly dense understory of hemlocks saplings.**

Type of harvest: **A regeneration harvest with 800 legacy trees left scattered and in small clumps to remain for at least one more rotation.**

Overall unit objectives: **Maximizing revenue for State Forest Board – Transfer (01); protecting water quality; maintaining productivity on the site and maintaining wildlife habitat through a tree retention strategy. This proposal meets or exceeds all of the guidelines and prescriptions set forth in the DNR Habitat Conservation Plan, Forest Resource Plan, and Forest Practices Rules and Regulations.**

c. Road activity summary. See also attached forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		**6,246**	**2.19**	**None**
Reconstruction		**100**		**None**
Maintenance				**None**
Abandonment		**3,003**	**1.03**	**None**
Bridge Install/Replace	**N/A**			**None**
Culvert Install/Replace (fish)	**N/A**			**None**
Culvert Install/Replace (no fish)	**15**			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See attached timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")

a. Legal description:

Section 02 of Township 28 North, Range 07 East
Section 11 of Township 28 North, Range 07 East
Section 03 of Township 28 North, Range 07 East

b. Distance and direction from nearest town (include road names):

The proposal is located 9.5 miles Northeast of Monroe, WA. The gate to the proposal can be accessed by traveling north on Woods Creek Road from Highway 2 in Monroe for 8.3 miles.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
WOODS CREEK	**42,531**	**62**
SULTAN RIVER	**24,098**	**23**

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)

Approximately 73% (62 gross acres) of this proposal is located within the Woods Creek WAU. The remaining 27% (23 gross acres) is within the Sultan River WAU. Both WAUs are comprised of public (i.e., federal, state, municipal, county, tribal), residential, non-industrial and industrial forest. The DNR manages the majority of the Sultan River WAU (13,280 acres, 55%) and 10,369 acres (24%) of the lands in the Woods Creek WAU.

Future forest management activities in the WAU include road building, rock pit expansion, silvicultural work and timber harvesting. Activities occurring on DNR managed land will follow Forest Practices Rules, Habitat Conservation Plan (HCP) guidelines, and the Forest Resource Plan, policies designed to minimize environmental impacts. Future forest management activities on privately managed, non-DNR lands will be subject to the Forest Practice Rules.

Woods Creek WAU:
A watershed analysis was conducted for the Woods Creek WAU in 1993 which focused on the following areas of resource sensitivity: surface erosion, mass wasting, hydrology, and riparian functions including shade, channel bed morphology, and fish habitat. The results from these analyses were used to design prescriptions to protect and allow the recovery of these resources. The activities related to this proposal abide by all applicable prescriptions, which include those for basin-wide road erosion and fine sediment input into streams.

Within the last 7 years, even-aged harvests occurred on 7% (691 acres) of DNR-managed lands in the Woods Creek WAU. In the same period, uneven-aged harvests on DNR-managed lands totaled 8% acres (849 acres). Among all ownerships in the last seven years, there have been even-aged harvests on 6% (2,632 acres) and uneven-aged harvests on 3% (1,152 acres) of the WAU.

Of DNR-managed land in the WAU, 61% (6,338 acres) is currently forested with trees 25 years or older. An additional 12% (1,242 acres) is forested with trees greater than 20 years old. Planned DNR activities within the next fiscal year (to be implemented over the next 5 years) include 355 acres of regeneration harvests. Therefore, in five years, 70% (7,225 acres) of DNR managed lands will be forested with trees 25 years or older (DNR "Maintaining Mature Forest Components" Policy #TK 14-001-010).

Sultan River WAU:
Within the last 7 years, even-aged harvests occurred on 9% (1171 acres) of DNR-managed lands in the Sultan River WAU. In the same period, uneven-aged harvests on DNR-managed lands totaled 6% (832 acres). Among all ownerships in the last seven years, there have been even-aged harvests on 8% (1,958 acres) and uneven-aged harvests on 4% (952 acres) of the WAU.

On DNR lands within the Sultan River WAU, 78% (10,359 acres) is forested with trees 25 years or older. An additional 6% (834 acres) is forested with trees greater than 20 years old. Planned DNR activities within the next fiscal year (to be implemented over the next 5 years) include 284 acres of regeneration harvests. Therefore, in five years, 82% (10,909 acres) of DNR managed lands will be forested with trees 25 years or older (DNR "Maintaining Mature Forest Components" Policy #TK 14-001-010). This information was complied from DNR GIS reports and maps produced on April 8, 2003.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☒Rolling, ☐Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The 24,098-acre Sultan River WAU consists of level to rolling terrain in western areas and gradually moves towards hilly topography with occasional rock outcrops and steeper slopes in the northeastern region. Elevation ranges from 89 feet above sea level to 3,095 feet (Mean = 1,002 ft.) across the WAU. Climate is typical for western Washington with mild, wet and maritime temperatures. Bisected by the southward flowing Sultan River, approximately 66% of the total WAU acreage falls within the rain-dominated zone receiving 50-90 inches per year. Conifers dominate forest stands in this region and are composed primarily of WH with RC in lower, wetter areas and DF in higher, drier ones. Red alder, black cottonwood and big leaf maple can also be found in smaller stands throughout the WAU.

Populated by forest stands of a similar type, the 42,531-acre Woods Creek WAU includes the entire 37,784-acre Woods Creek watershed plus 4,743 acres that drain directly to the Skykomish and Sultan Rivers. The WAU occupies part of a vast till plain formed by regional glaciation some 10,000+ years ago. Terrain on the till plain is gently rolling to moderately sloping with shallow depressions and swales. (Eighty-five percent of the WAU has ground slopes of 30 percent or less.) Steep escarpment slopes border the floodplain of most main streams. These steep slopes were formed as streams cut into the till plain. Floodplains and deep alluvial soils cover about 15 percent of the WAU and occupy the valley bottoms of the Skykomish River, Woods Creek and its main tributaries. Elevations within WAU range from 40 feet at Monroe to 1,870 feet in the northeast corner. Average elevation is about 500 feet and only 4 percent is over 1,000 feet. Average annual precipitation varies from 48 inches at Monroe to about 90+ inches at the highest elevations. Precipitation occurs predominately as rain.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

Straddling the eastern boundary of Woods Creek WAU and the western boundary of Sultan River WAU, the central portion of the proposal sits 895 feet above sea level on a NW-SE oriented knoll. The periphery of the proposal to the north, south and west drapes down the slopes (no greater than 30%) of this hill. The remaining southeastern portion of the proposal sits on a bench slightly lower (825 feet) in elevation. The overall terrain of the proposal is consistent with the rolling topography of both WAUs with aspects in the proposed sale varying from southeast to south.

b. What is the steepest slope on the site (approximate percent slope)?

30% slopes can be found on approximately 6 acres of the proposal.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture	% Slope	Acres	Mass Wasting Potential	Erosion Potential
8112	**TOKUL-OGARTY-ROCK OUTCROP-COMPLEX**	**0-25**	**56**	**Insignif**	**Low**
8113	**TOKUL-OGARTY-ROCK OUTCROP-COMPLEX**	**25-65**	**15**	**Medium**	**Medium**
8105	**GRAVELLY LOAM**	**8-15**	**14**	**INSIGNIFIC'T**	**LOW**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) Surface indications:

The slope stability report (P&T, 2003) for the proposal area indicates areas of potential instability in the southwestern portion of the sale. In addition, the Woods Creek Watershed Analysis "Surface and Road Erosion" map indicates areas of medium soil erosion potential. These areas have been observed by the NW Region Hydrologist/Soil Specialist and have been found to be 100 to 200-foot pitches of no more than 30% slope with no evidence of instability.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐No ☒Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

Woods Creek WAU:
The proposal is located in the Lower East Fork sub-basin. Evidence of natural failures were identified in the mass wasting mapping unit located close to the J Dozer sale MWMU-1 on the boundary of sub-basins Lower East Fork and Upper East Fork. In this area, a high density (approximately 50 per square mile) of shallow-rapid slope failures were found on convergent slopes. Deep-seated failures were found to be more rare.

Sultan River WAU:
There are few if any indications of slope failures in sub-basin 3 possibly because the terrain in this sub-basin rolling and benchy and located outside the rain on snow zone.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐No ☒Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
Associated management activity:

Woods Creek WAU:
Natural failures identified, such as those identified in MWMU-1 of the Watershed Analysis, have been generally associated with clearcut logging and road construction on steep, unstable slopes. As for soil erosion, skidder yarding with wheeled equipment was found to have the most frequent incidence of sediment delivery to streams. Other forest practices, such as cable yarding have been identified as having potential to contribute fine sediment to streams from surface erosion.

Sultan River WAU:
While some localized failures have occurred in the Sultan River WAU, they have generally been associated with mid-slope roads on steeper slopes outside of sub-basin 3, in the upper elevations of the northeast portion of the WAU.

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☒No ☐Yes, describe similarities between the conditions and activities on these sites:

In general, the site of this proposal is not similar to those where failures have previously occurred in the WAU(s). Most of this proposal lies on gently rolling terrain with slopes of less than 30%. Mass wasting map units (MWMU) have been identified as part of the watershed analysis performed for the Woods Creek WAU. No activity associated with the proposed timber sale will occur in the types of sensitive areas like those identified in the Woods Creek MWMUs. Finally, this proposal includes no mid-slope road construction, and no harvest activity will occur along the slopes of incised stream channels.

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

Roads were designed to minimize ground-based yarding distances to an average of 400 feet or less. Legacy trees have been left in the middle of the previously mentioned 30% slope located in the southwestern portion of the proposed sale area. The purpose of these trees is to reduce the yarding distances between LL-1206-02, a proposed road located near the top of this slope, and LL-12, a proposed road located at the bottom. In addition yarding equipment will be limited to shovels with tracks, not wheels.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: 2.2
Approx. acreage new landings: 0.3
Approx. acreage rock pit fills: 0.2
Fill source: Native Material

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Some localized erosion could occur during road construction and log transportation activities. However, prudent road construction techniques and normal maintenance practices will minimize the amount of erosion.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):

Approximately 3% of the proposal will be covered with permanent gravel roads at the completion of proposed activities.

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

To control road related erosion, road pioneering will not extend to more than 500 feet beyond completed construction, culverts will be installed concurrently with construction of the road subgrade, and culvert outlets will not terminate on unprotected soils. All exposed soils resulting from road construction will be re-vegetated or a protective cover applied prior to the onset of fall and winter rains. (Please also see B.1.d.5).

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

No emissions are anticipated other than minor amounts of equipment exhaust and road dust created by truck traffic.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Does not apply.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

If slash is burned, it will be burned in adherence to the State's Smoke Management Program.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See attached timber sale map and forest practice base maps.)

a) Downstream water bodies:

With the exception of a Type 9 stream located in the southeastern portion of the proposal area, there are no other bodies of water located within the proposal boundary. A stream running northwest from a wetland located 800 feet south of the proposal connects to the east fork of Woods Creek.

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Forested Wetland 1	**A**	**1**	**187.5**
Forested Wetland 2	**A**	**1**	**100**
Stream A	**No Type (not in sale)**	**0**	**N/A**
Stream B	**9**	**1**	**None**

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

No new road is being built through Riparian Management Zones (RMZs) or Wetland Management Zones (WMZs). All existing road through RMZs and WMZs will have Best Management Practices (BMPs) applied during hauling to ensure ditchwater and runoff will not enter or otherwise adversely affect water quality or RMZ/WMZ function. Proposal boundaries have been placed at site index length (187.5 feet) for Wetland 1 and 100 feet from Wetland 2.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐No ☒Yes (See RMZ/WMZ table above and attached timber sale map.)
Description (include culverts):

Timber will be harvested up to the 100-foot buffer of Forested Wetland 1 and up to the 187.5-foot buffer of Forested Wetland 2. Fifty-eight trees have been designated for harvest within the outer edge of the latter buffer.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

N/A

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
☒No ☐Yes, description:

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒No ☐Yes, describe location:

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒No ☐Yes, type and volume:

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?

The potential for eroded material to enter surface water from this proposal is low. All activity associated with this proposal will comply with Forest Practice standards, Habitat Conservation Plan guidelines, and Woods Creek Watershed Analysis Prescriptions (1993).

<u>Lower East Fork Sub-Basin:</u>
Yes, 7% of the soils in this sub-basin have high and 14% have medium soil erosion potential. The entire sub-basin has only medium or insignificant soil mass wasting potential.

<u>Sub-basin 3 of the Sultan River WAU:</u>
Yes, 2% of the terrain in this sub-basin has high soil erosion potential and 5% have medium potential. However the majority of the soils in this sub-basin have low soil erosion potential. Like the Lower East Fork Sub-basin, this sub-basin has only medium or insignificant soil mass wasting potential.

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☐No ☐Yes, describe changes and possible causes:

<u>Woods Creek WAU:</u>
There are no known channel changes due to surface erosion and increased flows. Erosion is occurring in the steep slopes of incised stream channels as they undercut the slopes. Although there is no known evidence of increased flows, they may have occurred because of past large-scale harvest activities.

<u>Sultan River WAU:</u>
Erosion is occurring in the steep slopes within the inner gorges of the main channel of the Sultan River and its major tributaries as they undercut slopes, especially in the northeast portion of the WAU. Although there is no known evidence of increased flows, they may have occurred as a result of past large-scale harvest activities.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☒No ☐Yes, explain:

This proposal should have not significant affect on stream and water quality.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒No ☐Yes, describe:

There are 5.3 miles of road per section in the sub-basin Lower East Fork and 5.4 miles per section in the Woods Creek WAU. There are 3.2 miles of road per section in sub-basin 3 and 3.5 miles per section in the entire Sultan River WAU.

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☒No ☐Yes, approximate percent of WAU in significant ROS zone.
Approximate percent of sub-basin(s):

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐No ☒Yes, describe observations:

Woods Creek WAU:
It is believed that peak flows may have occurred in the sub-basin associated with this proposal as a result of the past large-scale timber harvest through the 1940s. However, no evidence of such peak flows currently exists (Woods Creek Watershed Analysis, 1993).

Sultan River WAU:
There is evidence of peak flow events in the northeast portion of the WAU, likely facilitated by proximity to the rain on snow zone and the steep slopes in this part of the WAU. There is no known evidence of peak flows in the sub-drainage basin associated with this proposal.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.

This proposal should not provide any significant contribution to peak flow problems in either WAU.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒No ☐Yes, possible impacts:

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

Not applicable.

b. Ground Water:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Channeling water through ditches and culverts emptying out onto the forest floor will increase surface saturation in a local area, but is not expected to increase ground water.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Insignificant amounts of oil and other lubricants could be inadvertently spilled as a result of heavy equipment use. No lubricants will be disposed of on site.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒No ☐Yes, describe:

a) Note protection measures, if any.

N/A

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water runoff will collect in road ditches and be diverted through culverts back onto the forest floor.

2) Could waste materials enter ground or surface waters? If so, generally describe.

It is not anticipated that waste material will enter ground or surface water as a result of this proposal.

a) Note protection measures, if any.

N/A

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

Existing and constructed ditches, cross drain culverts, drain dips, water bars, etc. will be used to control runoff. Straw, grass seeding or other appropriate method will be used on exposed cut and fill slopes during the course of this proposal in order to prevent sediment movement. All activities associated with this proposal will meet or exceed Forest Practices standards, Habitat Conservation plan guidelines and Woods Creek Watershed Analysis prescriptions.

4. Plants

a. Check or circle types of vegetation found on the site:

☐deciduous tree: ☒alder, ☒maple, ☐aspen, ☒cottonwood, ☐western larch, ☐birch, ☐other:
☐evergreen tree: ☒Douglas fir, ☐grand fir, ☐Pacific silver fir, ☐ponderosa pine, ☐lodgepole pine, ☒western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☐Sitka spruce, ☒red cedar, ☐yellow cedar, ☐other:
☐shrubs: ☒huckleberry, ☐salmonberry, ☐salal, ☐other: **Sword fern**
☐grass
☐pasture
☐crop or grain
☐wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☒devil's club, ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐plant communities of concern:

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")

Two 14-year-old planted stands of DF and RC managed by DNR lie to the north of the northern portion of the unit. A 5-year old planted area of a similar species type, also managed by DNR, sits to the east of the sale area. A privately owned 5-year old stand resides to the east of the southern portion of the unit. The southern part of the entire unit is bounded by a 73-year-old DNR managed forest stand dominated by DF and WH, with significant patches of red alder, big leaf maple and black cotton wood in the wetter areas. Snags and down woody material >12" in diameter are present throughout these stands. To the west of the northern portion lies a 16–year old private DF plantation.

2) Retention tree plan:

Legacy tree levels were determined in accordance with DNR Forestry Handbook Procedure PR 14-006-090 (May 2000). In the proposed unit, a total of 800 green/wildlife trees will be retained (just over 9 trees per acre). This represents 7% of the stem count greater than 12"DBH, according to variable radius plots taken to determine trees per acre. Legacy trees are both scattered and clumped to provide a variety of upland habitat diversity. Selected reserve trees are either in the dominant or co-dominant crown classes, containing structural characteristics important to wildlife, and indicating wind firmness. In one area of the proposal, a group of 54 leave trees was marked together as a distinctive leave tree area (LTA) and marked with yellow leave tree tags. Remaining individuals are scattered or marked in small groups (<20 trees). Where possible, individuals and groups were selected to minimize the likelihood of windthrow (for example, many trees located at the edge created between mature timber and a stand of young trees, where marked, since these trees have already been "wind-tested").

c. List threatened or endangered plant species known to be on or near the site.

DNR's Trax system indicates no known threatened, endangered, or special concern species on or near the sale area.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None planned.

5. Animal

a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: ☐hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☐other:
mammals: ☒deer, ☐bear, ☐elk, ☐beaver, ☐other:
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☐oak woodlands, ☐balds, ☐mineral springs

b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

DNR's TRAX system indicates no known threatened, endangered or special concern species on or near the site.

c. Is the site part of a migration route? If so, explain.
☒Pacific Flyway ☐Other migration route: Explain if any boxes checked:

All of Washington State is considered part of the Pacific Flyway. No impacts are anticipated as a result of this proposal being completed.

d. Proposed measures to preserve or enhance wildlife, if any:

Trees left consist of dominant, co-dominant, and structurally unique trees. Leave trees are scattered and grouped. Legacy tree retention plan was established with the aid of the Region Biologist. Additionally, sale boundaries were placed 187.5 feet and 100 feet from wetlands located to the north and east of proposal in order to protect wetland function and water quality. All roads will be built to meet or exceed the standards set by Forest Practices. Please also refer to B.1.h. and B.4.b.2.

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

There is minimal hazard due to heavy equipment operations. There is a slight chance of hydraulic or oil spills from the heavy equipment that will be operating on the site. There is a potential fire hazard if operation in moderate fire weather conditions during summer months.

1) Describe special emergency services that might be required.

Does not apply.

2) Proposed measures to reduce or control environmental health hazards, if any:

Safe operation of all equipment will be encouraged. Industrial restrictions/precaution levels regarding forest fire protection will be enforced. The timber purchaser will be required to have fire suppression equipment on site during the restricted fire season while activities are happening.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noise from log trucks, gravel trucks, and logging equipment will be present while operating during daylight hours.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Noise from road construction and harvest activity will be present in the immediate vicinity of this proposal during the course of operations. Noise from log hauling, and gravel trucks will be present along the haul routes during the course of operations.

3) Proposed measures to reduce or control noise impacts, if any:

None. Noise associated with harvest and road construction activity will not be audible anywhere but in the immediate vicinity of the proposal. Noise from log hauling and gravel trucks are historic activities in the area and should not be present above customary levels.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)

Forest management.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

There are no structures on this site.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Commercial forestland.

f. What is the current comprehensive plan designation of the site?

Forestry.

g. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The design of this project is consistent with current comprehensive plans and zoning regulations.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does not apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

Does not apply.

1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☒No ☐Yes, viewing location:

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☒No ☐Yes, scenic corridor name:

3) How will this proposal affect any views described in 1) or 2) above?

Does not apply.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None needed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Does not apply.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

No designated recreational opportunities currently exist. Informal use may include hunting, ORV riding, hiking, mountain biking, and horseback riding.

b. Would the proposed project displace any existing recreational uses? If so, describe:

The road systems associated with this proposal are currently gated and closed to vehicle use. Use of the sale area by other users may be limited during the course of operations due to safety/security concerns. No permanent displacement of existing use will occur as a result of this proposal.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None. No permanent displacement of existing use will occur as a result of this proposal.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None identified in DNR's TRAX system.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

None needed.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Woods Creek Road.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

There is no indication that this proposal will contribute to such a problem. As the proposal is located in a rural area, traffic is minimal. All public roads accessing the area are paved, so use of these roads should not contribute to dust or maintenance problems.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

None.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

Apart from log hauling traffic during the course of operations, this proposal will have no impact on the overall transportation system in the surrounding area.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

0.04 trips per day (approximately once a month) for management purposes, for the first 5-10 years after the completion of the proposal.

g. Proposed measures to reduce or control transportation impacts, if any:

Safe operation of vehicles will be encouraged.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Access will be restricted as needed during periods of extreme fire danger.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Does not apply.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity that might be needed.

Does not apply.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by:_____, Date:_____
Title

Reviewed by:_____, Date:_____
Title

Approved by:_____, Date:_____
Title